IN THE CLAIMS

The presently-pending claims, along with their status identifiers, are provided below.

1. (Previously Presented) A method comprising:

using a mobile wireless communication protocol to communicate between a mobile device and a programming fitting server; and

programming software in a hearing aid using the programming fitting server and the mobile device.

2. (Previously Presented) The method of claim 1, wherein programming software in a hearing aid includes upgrading software in the hearing aid.

3. (Previously Presented) The method of claim 1, wherein programming software in a hearing aid includes sending a distributed application from the server to the mobile device, the distributed application being adapted to interact with the hearing aid.

4. (Previously Presented) A method comprising:

programming a hearing aid system through a mobile device using at least one mobile wireless communication protocol, wherein programming the hearing aid system includes:

receiving a distributed application in the mobile device from a programming fitting server through at least one long-range network using the at least one mobile wireless communication protocol; and

using the distributed application to program a hearing aid in the hearing aid system.

5. (Previously Presented) The method of claim 4, wherein the programming includes programming the hearing aid using a programming module coupled to the hearing aid.

6. (Withdrawn) A method for tailoring an audiological therapy for a patient, the method comprising:

deriving at least one audiological parameter by obtaining data about at least one aural response of the patient; and

programming a hearing aid system based on the at least one audiological parameter by a mobile device so as to tailor an audiological therapy for the patient.

7. (Withdrawn) The method of claim 6, wherein programming includes programming the hearing aid system based on the at least one audiological parameter by the mobile device that is adapted to communicate with a server.

8. (Withdrawn) The method of claim 7, wherein programming includes programming the hearing aid system based on the at least one audiological parameter by the mobile device that is adapted to communicate with the server through at least one network so as to tailor the audiological therapy for the patient.

9. (Withdrawn) A method comprising:

deriving at least one audiological parameter by obtaining data about at least one aural response of a patient; and

upgrading a piece of software capable of executing on the hearing aid system based on the at least one audiological parameter, wherein upgrading includes downloading the software by a mobile device.

10. (Withdrawn) The method of claim 9, wherein downloading includes downloading the software by the mobile device that is adapted to communicate with a server.

11. (Withdrawn) The method of claim 10, wherein downloading includes downloading the software by the mobile device that is adapted to communicate with the server through at least one network.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111
Serial Number: 09/492,913
Filing Date: January 20, 2000
Title: HEARING AID SYSTEMS

Page 4
Dkt: 899.011US1

12. (Withdrawn) A business method comprising:

deriving at least one audiological parameter by obtaining data about at least one aural response of a patient;

upgrading a piece of software capable of executing on the hearing aid system based on the at least one audiological parameter, wherein upgrading includes downloading the software by a mobile device; and

charging for upgrading the software in the hearing aid system.

13. (Withdrawn) The business method of claim 12, wherein downloading includes downloading the software by the mobile device that is adapted to communicate with a server.

14. (Withdrawn) The business method of claim 13, wherein downloading includes downloading the software by the mobile device that is adapted to communicate with a server through at least one network.

15. (Previously Presented) A system comprising:

a hearing aid system having a hearing aid;

a programming fitting server; and

a mobile device adapted to use a mobile wireless communication protocol to communicate with the programming fitting server and to program software in the hearing aid.

16. (Previously Presented) The system of claim 15, the server is adapted to transmit a distributed application to the mobile device, the distributed application being adapted to interact with the hearing aid.

17. (Original) The system of claim 16, further comprising at least one network to facilitate communications at least among the hearing aid system, the mobile device, and the server.

18. (Previously Presented) The system of claim 15, wherein the hearing aid system includes a hearing aid programming module.

19. (Original) The system of claim 15, wherein the hearing aid system is capable of audio signal processing.

20. (Previously Presented) The system of claim 15, wherein the hearing aid system includes a programming module adapted to communicate with the hearing aid, and wherein the programming module is adapted to communicate with the mobile device so as to receive at least one programming instruction from the mobile device to program the hearing aid.

21. (Original) The system of claim 20, wherein the programming module includes a headset.

22. (Original) The system of claim 20, wherein the hearing aid is capable of digital audio compression and decompression, and wherein the programming module is capable of digital audio compression and decompression.

23. (Original) The system of claim 20, wherein the programming module is capable of sending a test audio signal to the hearing aid so as to test at least one aural response of a patient.

24. (Original) The system of claim 15, wherein the mobile device includes a mobile device selected from a group consisting of a digital cellular telephone, a personal digital assistant, and a personal communication and information device.

25. (Original) The system of claim 24, wherein the mobile device is adapted to synchronize data with the server.

26. (Original) The system of claim 25, wherein the mobile device is adapted to receive an upgraded audiological software from the server.

27. (Original) The system of claim 15, wherein the mobile device is adapted to use a data service protocol selected from a group consisting of General Packet Radio Service (GPRS), High-Speed Circuit-Switched Data Service (HSCSD), Enhanced Data Rate for GSM Evolution

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111
Serial Number: 09/492,913
Filing Date: January 20, 2000
Title: HEARING AID SYSTEMS

Page 6
Dkt: 899.011US1

(EDGE), Integrated Services Digital Network (ISDN), Universal Mobile Telecommunications
System (UMTS), and Cellular Digital Packet Data (CDPD).

28. (Previously Presented) The system of claim 15, wherein the standard mobile wireless
communication protocol includes a wireless communication protocol to operate on a long-range
wireless network.

29. (Previously Presented) The system of claim 28, wherein the wireless communication
protocol to operate on a long-range wireless network includes a protocol selected from a group
consisting of Global System for Mobile Communications (GSM), Code Division Multiple
Access-One (cdmaOne), Time Division Multiple Access (TDMA), PDC, JDC, Universal Mobile
Telecommunications System (UMTS), Code Division Multiple Access-2000 (cdma2000), and
Digital Enhanced Cordless Telephony (DECT).

30. (Previously Presented) The system of claim 15, wherein the mobile device is configured to
communicate with the hearing system over a short-range network.

31. (Original) The system of claim 30, wherein the short-range network includes a short-range
network selected from a group consisting of a radio communication network, an optical
communication network, and a wired communication network.

32. (Original) The system of claim 31, wherein the optical communication network includes an
optical communication network using Infrared Data Association (IrDA) protocol.

33. (Original) The system of claim 30, wherein the hearing aid system is adapted to
communicate with the mobile device wirelessly through the short-range network.

34. (Previously Presented) The system of claim 17, wherein the server is adapted to couple to an
Internet.

35. (Previously Presented) The system of claim 34, further comprising a gateway adapted to be coupled in a communication path between the mobile device and the server.

36. (Previously Presented) A system comprising:

       a hearing aid system having a hearing aid;

       a distributed application; and

       a mobile device adapted to program the hearing aid, the mobile device adapted to use a mobile wireless communication protocol to receive the distributed application from a computer from a long-range network, the mobile device adapted to use the distributed application to program the hearing aid.

37. (Previously Presented) The system of claim 36, wherein the distributed application includes an applet.

38. (Previously Presented) The system of claim 37, wherein the applet is configured as a Java applet.

39. (Previously Presented) The system of claim 38, wherein the applet is adapted to receive information from the computer, and wherein the applet is adapted to transmit information to the computer.

40. (Previously Presented) The system of claim 38, wherein the mobile device includes a browser that is adapted to receive the applet to execute on the mobile device so as to interact with the hearing aid system.

41. (Original) The system of claim 16, wherein the server includes a database that includes patient data, and audiological data associated with at least one hearing aid system.

42. (Original) The system of claim 31, wherein the radio communication network includes a network selected from a group consisting of HomeRF, DECT, PHS, WLAN, and Bluetooth technology.

43. (Original) The system of claim 24, wherein the personal communication and information device includes a CompactFlash module that is adapted to communicate with the hearing aid system.

44. (Original) The system of claim 24, wherein the digital cellular phone includes a custom interface module that is adapted to communicate with the hearing aid system.

45. (Original) The system of claim 26, wherein the upgraded audiological software includes a piece of software to be executed on the mobile device.

46. (Previously Presented) The system of claim 26, wherein the upgraded audiological software includes a piece of software to be executed on the hearing aid.

47. (Previously Presented) A system comprising:

      a hearing aid system having a hearing aid; and

      a terminal adapted to program software in the hearing aid, the terminal adapted to use at least one wireless communication protocol to communicate with a programming fitting server to program the software.

48. (Previously Presented) The system of claim 47, further comprising the programming fitting server.

49. (Original) The system of claim 48, further comprising at least one network to facilitate communications at least among the hearing aid system, the terminal, and the server.

50. (Previously Presented) The system of claim 47, wherein the hearing aid system includes a hearing aid programming module.

51. (Original) The system of claim 47, wherein the hearing aid system is capable of audio signal processing.

52. (Previously Presented) The system of claim 47, wherein the hearing aid system includes a programming module adapted to communicate with the hearing aid, and wherein the programming module is adapted to communicate with the terminal so as to receive at least one programming instruction from the terminal to program the hearing aid.

53. (Original) The system of claim 52, wherein the programming module includes a headset that is capable of communicating ambient information.

54. (Original) The system of claim 52, wherein the hearing aid is capable of digital audio compression and decompression, and wherein the programming module is capable of digital audio compression and decompression.

55. (Original) The system of claim 52, wherein the programming module is capable of sending a test audio signal to the hearing aid so as to test at least one aural response of a patient.

56. (Original) The system of claim 47, wherein the terminal is a data terminal.

57. (Original) The system of claim 48, wherein the terminal is adapted to synchronize data with the server.

58. (Original) The system of claim 57, wherein the terminal is adapted to receive an upgraded audiological software from the server.

59. (Original) The system of claim 47, wherein the terminal is adapted to use a data service protocol selected from a group consisting of General Packet Radio Service (GPRS), High-Speed Circuit-Switched Data Service (HSCSD), Enhanced Data Rate for GSM Evolution (EDGE), Integrated Services Digital Network (ISDN), Universal Mobile Telecommunications System (UMTS), and Cellular Digital Packet Data (CDPD).

60. (Previously Presented) The system of claim 47, wherein the at least one standard wireless communication protocol includes a standard wireless communication protocol to operate on a long-range wireless network.

61. (Previously Presented) The system of claim 60, wherein the standard wireless communication protocol to operate on a long-range wireless network includes a protocol selected from a group consisting of Global System for Mobile Communications (GSM), Code Division Multiple Access-One (cdmaOne), Time Division Multiple Access (TDMA), PDC, JDC, Universal Mobile Telecommunications System (UMTS), Code Division Multiple Access-2000 (cdma2000), and Digital Enhanced Cordless Telephony (DECT).

62. (Previously Presented) The system of claim 47, wherein the terminal is configured to communicate with the hearing system over a short-range network.

63. (Original) The system of claim 62, wherein the short-range network includes a short-range network selected from a group consisting of a radio communication network, an optical communication network, and a wired communication network.

64. (Original) The system of claim 63, wherein the optical communication network includes an optical communication network using Infrared Data Association (IrDA) protocol.

65. (Original) The system of claim 62, wherein the hearing aid system is adapted to communicate with the terminal wirelessly through the short-range network.

66. (Previously Presented) A system comprising:

    a hearing aid system having a hearing aid;

    a programming fitting server adapted to store a distributed application; and

    a terminal adapted to program the hearing aid, the terminal adapted to communicate using a wireless communication protocol to receive the distributed application from the server from a long-range network, the mobile device adapted to use the distributed application to interact with the hearing aid.

67. (Previously Presented) The system of claim 66, wherein the terminal is configured to communicate with the hearing aid system using Bluetooth wireless communication protocol.

68. (Previously Presented) The system of claim 66, wherein the terminal is adapted to communicate using a Wireless Access Protocol.

69. (Previously Presented) The system of claim 66, wherein the distributed application includes an object that is adapted to receive information from the server and adapted to transmit information to the server.

70. (Previously Presented) The system of claim 66, wherein the terminal is configured to communicate with the hearing aid system over a short-range network using a protocol associated with the short-range network.

71. (Original) The system of claim 48, wherein the server includes a database that includes patient data, and audiological data associated with at least one hearing aid system.

72. (Original) The system of claim 63, wherein the radio communication network includes a network implemented using Bluetooth technology.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111
Serial Number: 09/492,913
Filing Date: January 20, 2000
Title: HEARING AID SYSTEMS

Page 12
Dkt: 899.011US1

73. (Withdrawn) A method comprising:

interacting with a client application executing on a mobile device, wherein interacting with the client application includes entering an identification of a patient;

determining at least one programming interface to program a hearing aid system that is at least based on a type of hearing aid system; and

programming the hearing aid system by the client application with the at least one programming interface.

74. (Withdrawn) The method of claim 73, wherein interacting with the client application includes interacting with the client application on the mobile device that is adapted to communicate using a wireless protocol.

75. (Withdrawn) The method of claim 73, wherein interacting with the client application includes interacting with the client application on the mobile device that is adapted to communicate using a Wireless Access Protocol.

76. (Withdrawn) The method of claim 73, further comprising communicating with a server application executing on a server coupled to an Internet through a long-range wireless network.

77. (Withdrawn) The method of claim 76, wherein communicating with the server application includes uploading the identification of the patient to the server application.

78. (Withdrawn) The method of claim 77, further comprising communicating with the client application by the server application.

79. (Withdrawn) The method of claim 78, wherein communicating with the client application includes downloading the at least one programming interface from the server application to the client application.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111
Serial Number: 09/492,913
Filing Date: January 20, 2000
Title: HEARING AID SYSTEMS

Page 13
Dkt: 899.011US1

80. (Withdrawn) The method of claim 79, further comprising tailoring the hearing aid system to the patient by adjusting the at least one programming interface by the client application executing on the mobile device.

81. (Withdrawn) A method comprising:

interacting with a client application executing on a terminal, wherein interacting with the client application includes entering an identification of a patient;

determining at least one programming interface to program a hearing aid system that is at least based on a type of the hearing aid system; and

programming the hearing aid system by the client application with the at least one programming interface.

82. (Withdrawn) The method of claim 81, wherein interacting with the client application includes interacting with the client application on the terminal that is adapted to communicate using a wireless protocol.

83. (Withdrawn) The method of claim 82, wherein interacting with the client application includes interacting with the client application on the terminal that is adapted to communicate using a Wireless Access Protocol.

84. (Withdrawn) The method of claim 81, further comprising communicating with a server application executing on a server coupled to an Internet through a long-range wireless network.

85. (Withdrawn) The method of claim 84, wherein communicating with the server application includes uploading the identification of the patient to the server application.

86. (Withdrawn) The method of claim 85, further comprising communicating with the client application by the server application.

87. (Withdrawn) The method of claim 86, wherein communicating with the client application includes downloading the at least one programming interface from the server application to the client application.

88. (Withdrawn) The method of claim 87, further comprising tailoring the hearing aid system to the patient by adjusting the at least one programming interface by the client application executing on the terminal.

89. (Withdrawn) A data structure to be uploaded to a server for tailoring an audiological therapy, the data structure comprising:

a patient identification to identify a patient; and

at least one aural response obtained by testing the patient.

90. (Withdrawn) A data structure to be downloaded from a server for tailoring an audiological therapy, the data structure comprising:

a distributed application to be executed on a device to interact with a hearing aid system so as to tailor an audiological therapy.

91. (Withdrawn) The data structure of claim 90, wherein the distributed application is an applet.

92. (Withdrawn) The data structure of claim 90, wherein the distributed application is at least one object adapted to be distributed.

93. (Previously Presented) The system of claim 36, wherein the mobile device is configured to communicate with the hearing aid system using Bluetooth wireless communication protocol.

94. (Previously Presented) The system of claim 36, wherein the mobile device is adapted to communicate using a Wireless Access Protocol.

95. (Previously Presented) The system of claim 36, wherein the mobile device is configured to communicate with the hearing aid system over a short-range network using a protocol associated with the short-range network.